## **Spatial Variations in Under-Five Mortality in South Africa**

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Child mortality remains a huge challenge in South Africa. Although there have been numerous national level child mortality studies, few studies have focused on child mortality and its determinants at sub-national levels. This paper uses data collected from the 2007 Community Survey to investigate district level variations in under-five mortality rate (U5MR) in South Africa. Exploratory Spatial Data Analysis techniques are used to examine the spatial structure and distribution of U5MR and spatial regression models employed to explore the relationships between U5MR and a set of predictors. Models are compared and the benefits of spatial data analysis in targeted child mortality reduction are discussed.

**Key Words:** Child Mortality, Exploratory Spatial Data Analysis, Spatial Regression.